

Memorandum

TO: Tom Sigmund

FROM: Patrick Wescott

DATE: January 22, 2020

SUBJECT: Granular Activated Carbon Adsorber Failure Costs

Background

The following is a summary of major costs associated with the Granular Activated Carbon (GAC) Adsorber failure on November 7, 2019. The costs provided in the table were obtained from invoices and purchase orders. The total cost is an estimate using the best available information at the time of collection. There may be additional invoices or purchase orders that are not currently included in this summary.

NEW Water staffing hours and associated labor and benefits costs are estimated. NEW Water staff does not track hours related to projects, with the exception of hourly members of the Maintenance Department. An average NEW Water staff hourly rate (year 2019) was used to calculate NEW Water labor costs. NEW Water staff benefits were calculated and factored in. It is my intent to accurately capture labor and benefits costs as accurately as possible with the understanding that most staff members working on this project do not track labor hours.

The cost information will be updated periodically when new information is available. A total cost of repair will be provided once the situation is corrected.

GAC Failure Cost Tracking

		Cost	
1	Sludge Hauling	McKeefry	\$ 201,663.75 Through 01/16
2	Landfilling	Port and Solid Waste	\$ 116,008.00 Through December
3	Landfilling	Waste Management	\$ 181,076.25 Through December
4	Landfilling	Advanced Disposal (Veolia)	\$ 47,530.95 Through November
5	Spare Parts (internal)	CPPE	\$ 25,940.05
6	Repair	Scaffolding rental	\$ 5,350.00
7	Spent Carbon Analysis	Synergy Reports	\$ 5,670.00
8	Spent Carbon Removal	SECSI	\$ 58,798.63 Through December
9	Stack Testing	Advanced Industrial Resources	\$ 11,550.00
10	Sludge Analysis	PACE	\$ 258.00
11	Tank Repair	Fiberglass Solutions	\$ 5,819.00
12	Tank Inspection	Fiberglass Solutions	\$ 1,080.00
13	Replacement Carbon	CPPE	\$ 129,875.00
14	Replacement Carbon	Fremont	\$ 133,740.20
15	Legal	Godfrey & Kahn	\$ 132,826.00 Through December
16	Root Cause Analysis	Chavond-Barry	\$ 20,000.00 Estimate
17	Air Permit Consultation	S.E.H.	\$ 22,562.00 Through December



18	Spare Parts	NEW Water	\$ 1,600.00	
			\$ 1,101,347.83	
19	Estimated staff hours	NEW Water	2,745	Through 01/17/20
	Estimated labor and benefits cost	NEW Water	\$ 121,878.00	
20		Total	\$ 1,223,225.83	

Recommendation

Informational purposes only.